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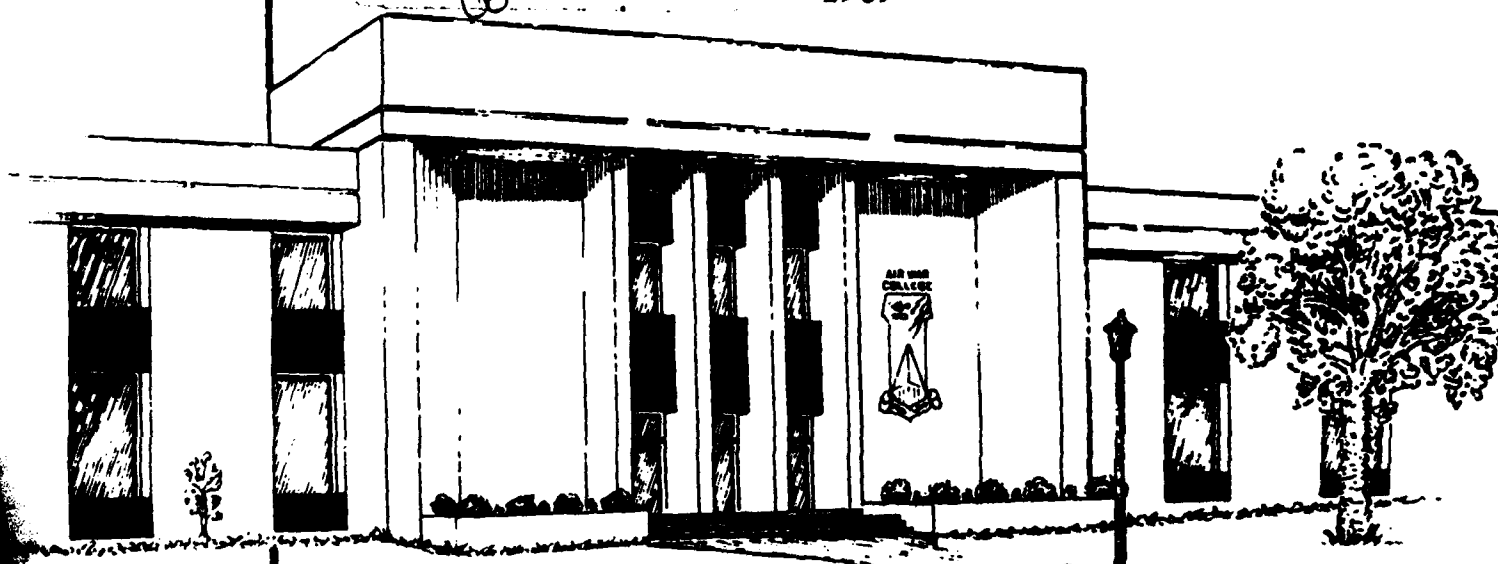
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NORWAY AND THE NORTHERN FRONT: WARTIME PROSPECTS

COMMANDER ROBERT F. KERNAN, USN

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AIR UNIVERSITY
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

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NORWAY AND THE NORTHERN FRONT:
WARTIME PROSPECTS

by

Robert F. Kernan
Commander, USN

A DEFENSE ANALYTICAL STUDY SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE CURRICULUM
REQUIREMENT

Advisor: Captain Ricky Morris, USN

MAXWELL AIR FORCE BASE, ALABAMA

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EXECUTIVE SUMMARY

TITLE: NORWAY AND THE NORTHERN FLANK: WARTIME PROSPECTS

AUTHOR: Robert F. Kernan, Commander, USN

Since 1949, NATO has relied on Norway to hold the Northern Flank against a Soviet invasion until allied reinforcements arrive. This paper assesses the ability of Norway to do this based on its military force structure and political climate. NATO strategy for war in the Norwegian Sea is reviewed as are proposed Soviet plans for the invasion of Norway. Findings predict the outcome and assess NATO's reliance on Norway. Several recommendations are made to improve US and NATO strategy on the Northern Flank. (S)



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BIOGRAPHICAL SKETCH

Commander Robert F. Kernan is a Naval Academy graduate who earned his Naval Aviation wings in 1976. He has approximately 2800 hours in the P-3C Orion antisubmarine aircraft. He enjoyed two tours in operational P-3 squadrons and one as an instructor in the east coast P-3 Replacement Air Group. He spent the majority of his career stationed in Jacksonville, Fl. He has participated in deployments to Sigonella, Sicily and Keflavik, Iceland. Commander Kernan is a graduate of the Air War College, class of 1989.

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CHAPTER I

INTRODUCTION

On April 4, 1949, the North Atlantic Treaty was signed in Washington D.C. by twelve nations. All of them then agreed to a collective deterrence and defensive alliance as protection from the new hegemonic tendencies of the Soviet Union. All who gathered under NATO's umbrella maintained fears of a worst case scenario shaped by the global conflict from which they had just emerged. At the time of signing, Norway was the only member country who shared a border with the Soviet Union. Although often characterized as a peace loving people, twentieth century history and international politics forced the Norwegians into a precarious strategic position. As NATO/Soviet battle lines and plans began to take shape, it was clear that Norway was to play more than just the pawn's role as its military strength suggested.

These considerations were fresh and poignant in the spring of 1949. But has history over the last forty years maintained Norway's strategic importance? Yes, even more so! This contention coupled with Norway's unique character and NATO membership caveats bring me to the purpose of this paper; an analysis of NATO's ability to hold the northern front in Norway and in the waters north of the Greenland-Iceland-United Kingdom (GIUK) gap during the initial stages of a protracted global conflict with the Soviet Union.

CHAPTER II

HISTORY SHAPES NORWAY

WORLD WAR II

To the Soviets in 1949, Norway's bordered position now conjured wartime possibilities of the worst case imaginable; direct invasion of Mother Russia. Visions of the German invasion during the last war and memories of twenty million lost loved ones touched nearly every family in the Soviet Union. To the NATO countries, loss of Norway represented severance of the lifeline to the west so vital in the case of a protracted global conflict.

Events of WWII shaped Norway's current military views. Removed from the center of this conflict, with no treaty obligations, Norway saw no reason to become involved. Seeking to secure her peace, she declared neutrality along with Finland and Sweden in 1939. She was shortly to discover the curse geography had placed on her peace loving people.

Norway's strategic importance began to take shape in Hitler's Germany. Lacking indigenous iron ore essential to the Third Reich's war machine, Hitler was forced to import it from Sweden through the Baltic Sea. The iron ore would travel by rail through northern Norway, by ship along on the Norwegian coast and through the Danish Straits to Germany. (1:43)

Here we see Norwegian neutrality begin to crumble. British strategic planners recognized the value of Germany's iron pipeline and considered a blockade. They hesitated with the plans for fear of violating Norwegian territorial waters. Other Allies saw the

strategic importance of a presence along the western coast of Norway but again were hesitant to land troops until they saw evidence of German action in the neutral region. Heeding the adage "he who hesitates is lost", the Germans accelerated their invasion plans. In April of 1940, they invaded Denmark. After Denmark fell, the Third Reich forces continued on to take the Norwegian cities of Oslo, Kristiansand, Trondheim, Bergen, Stavanger and Narvik. Already in place when the Allied counter naval invasion struck, the Germans were able to beat the landing force back into the sea. On 9 June 1940, the Norwegian Army surrendered. Thus began Germany's five year occupation of "neutral Norway". (1:45)

This date also marked a change in the global significance of the peace loving Norwegians. Like it or not, their strategic position took away any future guarantees of neutrality during a global conflict.

CHAPTER III

NORWAY AND NATO

SCANDINAVIAN ALTERNATIVE

Memories of German occupation were to have a profound effect on Norway's defense thinking. Defense of Norway became complicated as the potential NATO and Warsaw Pact countries began to polarize. In July of 1948, talks on North Atlantic defense began in Washington D.C. between the United States, Canada and the Brussels Treaty Powers. This led to the drafting of the North Atlantic Treaty in December. Meanwhile, Norway was involved in its own negotiations with Sweden and Denmark for a defense alliance. The Scandinavian negotiations broke down when Sweden would not capitulate on its stipulation that the alliance maintain complete neutrality. Norway now looked toward the proposed North Atlantic Treaty Organization (NATO).

SOVIET INFLUENCE

Complicating Norway's decision on NATO membership was the severe diplomatic pressure from the Soviet Union. On January 29, 1949, the Norwegian government received a note from the Soviets warning against Norwegian participation in the proposed Atlantic Pact. In their 5 February reply, Norway said it would

...never participate in a policy with aggressive aims and does not intend to enter into agreements with other countries which would commit Norway to the establishment of bases on Norwegian territory for the military forces of foreign countries as long as Norway has not been attacked or threatened with attack. (2:16)

The USSR went so far as to offer a nonaggression pact with its neighbor. Norway rejected the proposal with further assurances

of the purely defensive nature of its NATO membership. Many NATO members felt manipulated by the Norwegian concessions. After all, Norway was almost totally dependant on other powers in the alliance for its defense. The Norwegian Defense Minister attempted to soothe the rest of NATO by pointing out what Norway's policy did not prevent. It did not prevent Norway from; entering into foreign basing agreements in the event of a threat to its national security, building up its own military forces, participating in joint allied exercises or receiving short visits from naval and air forces in peacetime. (2:17)

CONCESSIONS IN MEMBERSHIP

Norwegians clearly realized the need for the deterrence and protection afforded by NATO, yet also felt intimidated by the "bear" with whom they shared a common border. Consequently, Soviet intimidation led to the numerous caveats accompanying Norway's membership in NATO. Since that time, Norway has had to wrestle with Soviet intimidation on almost every military decision. In 1960, Norway placed a ban on the peacetime presence of nuclear weapons within its borders. This concession was seen as necessary for the same reasons as the base ban; it was a placating response to the Norwegian's perceived a need to maintain the best possible relationship with its red neighbor. (2:18)

Norway has undertaken other self-imposed restrictions since its induction into the NATO alliance. All have been in response to direct or indirect pressure from the Soviet Union.

Specifically:

- Joint allied military exercises must always take place outside

Finnmark (the northern most province of Norway)

- Allied aircraft are not allowed to enter Norwegian airspace east of the 24th degree of longitude
 - Allied naval vessels are not given admission to Norwegian territorial waters east of the same meridian
 - Foreign ships entering Norwegian ports do not carry nuclear arms
- (3:64)

US EQUIPMENT PREPOSITIONING

The most significant action taken by the Norwegians in support of the NATO alliance occurred in 1981. Seeing the need for rapid reinforcement of their vastly inferior military force in the event of a Soviet attack, Norwegians requested the prestocking of U.S. military equipment on their soil. The equipment included sufficient heavy artillery, trucks and tanks, bridging equipment, ammunition, fuel and food to support a 13,500 man marine amphibious brigade. (14:118) Norway agreed to provide one half of the \$700 million cost of the stockpiling, storage facilities, over-snow vehicles, ambulances, air base equipment and fueling trucks. (5:41) Now, in the event of a crisis, U.S. Marines could be airlifted to Norway and equipped to fight within several days. Previously, the shipping of their equipment would cause a delay of approximately two weeks. Other advantages from a Norwegian perspective included an increased deterrence level by the signaling of higher U.S. commitment. To the Norwegians, the prepositioning would also support its base ban policy in that the quicker U.S. response time eliminated the need for troops on Norwegian soil. Another vital part of the plan included a \$500 million commitment by Norway to preposition equipment for an

additional Norwegian brigade in the north.

The Norwegians wrestled with several factors concerning their decision to request the prestocking. As was the case in many of their military decisions, they were the target of a concentrated campaign by the Soviets seeking to block the move. At one point, the Soviet ambassador to Norway told the deputy chairman of the ruling Labor Party "We would know how to react, how to make trouble for you". Heightened tensions also sparked heated debate within Norway. (20:120) In an effort to diffuse the tensions, Norwegian minister Knut Frydenlind met with Andrei Gromyko of the USSR for the first time in 15 years. During the meeting, Frydenlind assured the Soviets that the arms stockpile would pose no offensive threat. Gromyko sharply criticized the move. (6:A15) Although Norwegians rejected the criticism, they did concede to place the equipment in the area of Trondheim instead of northern Norway placing it over 500 miles from the Soviet border. This location made the storage seem less offensive. (14:119)

CHAPTER IV

GEOGRAPHY AND DEMOGRAPHY

THE PEOPLE AND THE LAND

As mentioned previously, geography played a big part in determining the strategic importance of Norway. The fourth largest country in NATO, Norway has a coastline that stretches almost the length of the eastern coast of the U.S. Although comparable in size to the combined area of West Germany, The Netherlands and Denmark whose population totals over 80 million, the sparsely populated Norway contains slightly over 4 million people. (7:7) The majority of the population, 3.5 million, live in the southern portion of the country (the area south of about 100 miles north of Trondheim). (8:4) Finnmark, Norway's northern most county, is naturally divided along the 122 mile border with the Soviet Union by mountainous terrain to the west. Currently, Turkey is the only other NATO country directly bordering the USSR. There is a very poor road and rail network connecting the northern and southern portions of the country adding to logistics problems. In accordance with a treaty concluded in Paris in 1920, Norway was also awarded sovereignty over the Svalbard archipelago to the north. Two stipulations to its ownership remain; all other signers of the Spitzbergen Treaty have equal economic access to the islands and the islands have no military installations. The islands do maintain a modern airfield. Interestingly, the Soviet Union maintains the only non-Norwegian presence on the islands in the form of several coal mining communities. (7:7) To the west of Norway in the northern part of the Norwegian Sea lies the small island of Jan Mayen. It is a small

volcanic land mass that harbors a Norwegian garrison. (4:14)

The majority of Norway's air fields are stationed in the north. Fields at Banak, Tromso, Bardufoss, Andoya, Eveness, Bodo, and Vaernes currently allow for the positioning of allied air assets in the event of a conflict. (9:44) A single railway and road paralleling the coast services these installations with the only ground route from the more populated and stockpiled areas in southern Norway. More restricting is that the railway ends at Bodo, the southern most of the northern airfields. (9:44) (see appendix A)

THE SEA

The waters adjacent to the Norwegian land mass are also of strategic importance. The Norwegian Sea is bounded to the east by the Norwegian coast and the Barents Sea, to the west by a line from Iceland to Spitzbergen and to the south by the North Sea. The ice barrier plays an important role in that it dictates sea passage lanes which change with the time of year. South of about 75 degrees latitude, the sea is free of ice all year. In wintertime the passage may narrow to about 200 mile wide as the ice pack moves southward. All ports in Norway are ice free year round. (8:3) (see appendix B)

The Norwegian Sea will be vital to the Soviets in a wartime scenario for several reasons. First, it will provide a vital transit lane for submarines to and from the Mediterranean Sea. The Soviets keep a constant watch on the U.S. carrier battle groups in the Mediterranean through use of the eight or so submarines it keeps stationed there. Second, it will provide a transit lane for the ballistic and cruise missile submarines taking station in the Atlantic Ocean. Third, it will be used by Soviet surface groups to

stage interdiction efforts against the sea lines of communication between European forces and the U.S. In peacetime, we have seen its use in numerous maritime exercises involving both the Northern and Baltic fleets. It is also used by Soviet surface intelligence gatherers. (8:15)

CHAPTER V

THE NORDIC MILITARY

NORWAY

In light of its decision on the basing of foreign troops, Norway is charged with single-handedly repelling a Soviet invasion until NATO reinforcements arrive. The Norwegian Army available for this defense consists of 19,000 personnel on active duty, 165,000 reserves and a home guard of 72,000. Most of the forces available for an immediate response in the strategically important north, are concentrated in the vicinity of Bardufoss. Known as Brigade North, the force consists of 5,000 men, three infantry battalions, one tank company, one artillery battalion, one anti-aircraft battery and two border garrison battalions. There are also prepositioned supplies for another brigade. Brigade North is charged with protecting the major airbases of Bodo, Andoya, Bardufoss and selected coastal zones. There is also an infantry battalion on the Soviet border and a battalion group of 1000 men in central Finnmark. (22/59) There are a few helicopters assigned to the ground forces with reinforcements available from the oil platforms if needed. Modernization rates are extremely slow. (8:148)

The Royal Norwegian Navy is mainly one of coastal defense. It maintains a higher ratio of active duty personnel than does the Army with 14 submarines, 5 frigates, 2 corvettes, 38 fast attack craft, 10 mine sweepers and 7 landing craft. Norway has a modern ocean going merchant fleet of 700 ships that will be available for wartime support. Haakonvern Naval Base is Norway's largest located in the south near the city of Bergen. Only a fraction of the naval forces

are deployed in the north at one time. It is estimated that the rest of the fleet could mobilize to repel an attack in the north in a week or so. Its land based coastal defense consists of gun and torpedo batteries housed in antique forts vulnerable to Soviet attack.

(9:46) Norway has begun a submarine fleet modernization effort with an order to purchase six German submarines while refurbishing six of their own. Coastal artillery sites are also being upgraded. Future prospects for their surface navy are bleak. By 1990, the majority of surface ships will be over 25 years old. (11:147)

The Air Force is a bright spot in the Norwegian defense. It is well equipped with state of the art aircraft. (9:46) In the late 70's, under pressure from NATO, defense budgets began to increase to 3.0 per cent of the total gross national product (GNP). Despite the objection of the Army and Navy, a large portion of this increase was allotted toward the purchase of seventy-two F-16's. Purchase of the aircraft consumed the majority of the defense budget over the next five years. These aircraft can fire the Sidewinder air to air missile but lack a valuable air to surface capability.

(7:128) Norwegian industry is working on a variant of the Naval Penguin missile, which will be operational sometime this year. Air forces also boast of one squadron of F-3B Orion anti-submarine aircraft and one of Sea Lynx surveillance helicopters. Anti-submarine aircraft will have to be replaced or updated in the near future. (11:147)

FINLAND

Finland has maintained an interesting relationship with the Soviet Union. Following the Paris Peace Treaty of 1947, Finland,

twice defeated by Russian forces during the war, found itself with constraints on its peacetime military force. Finnish forces were limited to 34,000 Army, 3,400 Navy and 3,000 Air Force personnel. Equipment restrictions were also imposed limiting their airforce to 60 combat aircraft. Furthermore, all systems were to be defensive thus excluding bombers, missiles, submarines and the possession and testing of nuclear weapons. Finland was allowed it to devote as much as it felt was needed to upgrade the quality of its equipment.

(14:37)

In 1948, Finland entered into a Treaty of Friendship with the Soviet Union. The meat of the document consisted of an agreement for Finland to resist, by all means available, an attack on its territory by Germany or its allies. It further prohibited them from entering into an alliance directed against the Soviet Union. One interesting stipulation required consultation between the high commands of both countries in the event of a crisis preceding an attack. (14:38)

Force distribution within Finland is decidedly in favor of the southern part of the country. This is in response to the Soviet military build up in the Leningrad Military District. The Soviets maintain a formidable force in this area: 1 motor infantry division, 1 army brigade, 1 spetsnaz brigade, 5 airborne divisions, 500 tactical aircraft and 180 fighter bombers. The Finns have stationed 8000 troops in the north mainly in response to concern from their Nordic neighbors. (12:5)

Since the Paris treaty's inception, a few minor changes have been incorporated but none of them allowed for significant increases in Finland's military strength.

SWEDEN

The Swedes maintain a peacetime Army of 47,000 of which 37,000 are conscripts. They claim upon mobilization, they could field 700,000 troops plus 100,000 home guard. The north is protected by five light Norrland brigades and the south by four armored brigades when mobilized. Their Air Force consists of locally manufactured fighter aircraft with prospects of acquiring an early warning aircraft. (14:130)

Swedish/Soviet relations have been strained in recent years. On May 12, 1980, a submarine was detected inside Sweden's territorial waters near the entrance to Karlskrona, one of two major Swedish naval bases. Other suspected Soviet sub excursions were detected that year and eight more in 1981. In October of 1981, indisputable evidence of Soviet violation of sovereign waters ran aground in the form of a Whiskey class submarine. The alarm over these submarine excursions gave the Swedish Navy a needed boost but it will continue to limit its operations to coastal waters. (14:37)

CHAPTER VI

SOVIET FORCES

THE KOLA PENINSULA

Staring across the northern border at Norway from the east is the Soviet buildup of military forces in the Kola peninsula (see appendix C). Called the most concentrated area of arms buildup in the world, it clearly indicates the importance the Soviet Union places on the security of this area. When one looks at the type of forces located in this region, it's obvious that Soviet intentions are more than just defensive in nature.

The Northern Fleet, the largest the Soviets maintain, is based on the Kola peninsula. The Northern fleet order of battle speaks for itself:

| | |
|-----------------------------------|------------------------|
| Aircraft carriers - 1 | Auxiliaries - 99 |
| Principal surface combatants - 73 | Submarines |
| Other combatant ships - 82 | Cruise missile - 36 |
| Naval infantry brigade - 1 | Ballistic missile - 45 |
| Naval aircraft - 443* | Attack - 92 |

* (including fighter bombers, helicopters, surveillance aircraft and carrier launched interceptors) (12:14)

Air forces on the Kola peninsula are extremely formidable. There are 17 (9 operational) airfields on the peninsula that maintain the 120 interceptor aircraft, 30 SAM sites and 200 launchers assigned (see appendix D). (9:45) The location of other nearby airfields and observance of Soviet exercises indicate that the number of aircraft in the Kola could be doubled on very short notice with assets from the Leningrad Military District. (13:86)

Kola ground forces consist of two motorized rifle divisions, one near Murmansk and one at Kandalaksha, each consisting of 12,000 men and 200 tanks. A Marine Infantry Regiment with 1900 men specializing in amphibious operations is located at Pechenga and an airborne brigade in the Murmansk area. These forces are supported by 1 missile brigade, 1 artillery brigade, 1 air defense regiment and 1 spetsnaz brigade. The total peacetime strength is on the order of 40,000 personnel. (10:11)

CHAPTER VIII

NATO STRATEGY

PHASE I

An examination of the stated NATO strategy on the Northern Front proves useful in assessing Norway's effectiveness. It involves a phased approach based on an adequate lead time of ten days. Phase one, the transition to war, would see the following with regard to the Northern Flank; U.S. surface and subsurface forces deploying to operating stations north of the GIUK gap, air reinforcements sent to NATO airfields and U.S. Marines airlifted to join up with prepositioned supplies. (9:50)

PHASE II

Phase two, seizing the initiative, would take place upon commencement of hostilities. Anti-submarine assets including land and carrier based aircraft, surface ships and submarines would engage the Soviet submarine fleet in the Norwegian and Barents Sea. Carrier Battle Group objectives would be threefold. They would engage and attrite Soviet aircraft at the fringes of the battle group distant support area. Without air superiority over the Norwegian Sea an effective sea control policy would be impossible. The battle group would also support the landing of Marines to both repel the Soviet land attack and interdict Soviet land force lines of communication with landings behind enemy lines on the north Norwegian coast. Finally, they would search out and destroy Soviet Action Groups with an eye out for their carriers. (9:50)

PHASE III

Phase three, carrying the fight to the enemy, would consist of swift defeats of enemy forces, regaining of lost territory, and support of the theater land campaign. Specifically, it would witness a victorious land campaign in Norway, recapturing of Jan Mayen and the Svalbard islands, possible strikes into the Kola peninsula and antisubmarine operations that put the Soviet SSBN's out of action.

(9:51)

CHAPTER VIII

ANALYSIS

. HISTORY

My analysis of Norway's ability to carry out its NATO responsibilities will be based on both its historical precedents and its current capabilities presented in the background portion of this paper.

Historically, Norway, even as a neutral power, invited invasion for reasons related to its geographical position. Although Germany viewed Norway as strategically important for reasons not so applicable today, it remains the strategic centerpiece of NATO's Northern Flank. As post World War II history has unfolded, Norway's geographic "curse" has increased significantly. As alliances formed among NATO and Warsaw Pact countries, Norway was forced into a unenviable position. Norway's allies, countries most aligned with its own form of government, did not share her unique handicap. She was the sole nation sharing a common border with the arch-enemy. The Soviet Union's search for a year round warm water port found Murmansk, a mere 90 miles from the Norwegian border, as most suitable. The resultant military buildup in this area has exacerbated Norway's geographical dilemma.

Also supporting the buildup on the Kola Peninsula is Russia's major emphasis on its ballistic missile (SSBN) submarine force. They have earmarked it as the most survivable leg of their nuclear arsenal providing for its preservation at all costs. This mind set led the Soviet Union to create bastions for the protection of their SSBNs. As the capabilities of Soviet strategic assets and launch platforms

improved, these bastions have migrated farther and farther north. This has occurred for two main reasons. First is the technology advancement in the inter-continental ballistic missile (ICBM). As ballistic missile range and accuracy increased, submarine launch platforms were allowed to stay safely within an umbrella of Mother Russia itself. Second is the ability of submarines to operate under the polar ice cap. The masking provided by operations in this noisy environment made for safer submarine havens.

It is therefore reasonable to assume that the bastion will be concentrated in the northern waters, with a southern limit hardly exceeding a line drawn between the island of Jan Mayen and the Norwegian counties, Troms and Nordland (3:50)

These developments have multiplied the Soviet's need for wartime control of the Norwegian Sea. Its control has become central to Soviet strategy in the Northern Flank. From a NATO perspective, control over the area is imperative for it must serve as an operating area for anti-submarine operations by surface, sub-surface and airborne platforms. Thus Norway becomes a pivotal land mass. By controlling Norway, NATO can control the Norwegian Sea. Once this control has been achieved by the allies, Soviets can be kept bottled up in the Barents Sea, effective anti-submarine and anti-surface operations can be conducted against transiting naval units, and NATO assets can pursue bastioned Soviet submarines in northern areas and under the ice cap.

SOVIET NORTHERN FLANK OBJECTIVES

We must answer two important questions in analyzing the ability of Norway's forces to play their vital part in holding the Northern Flank against the initial Soviet invasion. "What are the

specific Soviet objectives on the Northern Flank during a global conflict?" and "How will they go about achieving them?".

They have two major objectives. First, they intend to protect their own seaborne strike capabilities (most importantly their ballistic missile submarines) in the areas north of the GIUK gap. Second, they will strive to cut off the NATO sea lines of communication in the North Atlantic.

As we look at Soviet objectives, it becomes clear that the overall strategy to be employed in attainment of these involves control of the seas north of the GIUK gap. The biggest obstacle to attainment of sea control in this area is the enemy that lies to the west. This alone overrides all Soviet rhetoric concerning the defensive nature of their military buildup in the Northwestern Military District. Norway's geographical position necessitates an offensive strategy by the Soviet Union. Defense of its strategic assets and Mother Russia itself only add incentive to the employment of an invasion into Norway early in the war.

INVASION OPTIONS

Invasion options facing the USSR are varied, but all initially involve control of Norwegian coast. The only area for conjecture is how they will get there. One obvious campaign will involve a direct assault by ground forces across the Russian-Norwegian border. The 45th Motorized Rifle Division would launch an attack from its position in Pechenga to overcome the relatively small border garrison providing Norway's the first line of defense. They would endeavor to advance over land in order to join up with airborne and naval infantry units who would have conducted a planned simultaneous

air/amphibious invasion of the Norwegian coast. This invasion would be supported by air strikes from Kola fields against Norwegian bases in the north. Once coastal airfields were secured, a possible redeployment of Soviet air and naval assets would set the stage for the second phase of the campaign; Norwegian Sea control. This plan would be hampered somewhat by the natural barrier of mountainous terrain encountered during the march west toward the coast. Additionally, the scheme of maneuver would be severely hampered due a sharp narrowing to about 95 miles between the Finnish border and the sea. (9:48)

The initial phase of an alternate campaign might be an advance along a more southerly route through Finland. Although this would involve violation of Finnish neutrality, it may not pose the problems one might imagine. Unfortunately, Finland has been unable to capitalize on its treaty allowance for force modernization. They spend only 1.5 per cent of their GNP on defense. As late as 1985, many military sources within Finland were telling the woes of the inadequate fire power, mobility and equipment. (7:148)

Although not friendly, Finn/Soviet relations are not as cool as we would like. One half of the 60 Finnish fighter aircraft were obtained from the Soviets who also provide the ATOLL missile they carry. The Nordic military expert, John Ausland states:

...We cannot be sure what demands the Soviets would make on the Finns in a crisis, nor how the Finns would react to them. Even if the Finns would reject any Soviet demands for the use of their territory, there would still be a question of the timing of any Finnish mobilization. Given all these uncertainties, I can understand the concerns in NATO military circles about the role that Finland would play in any conflict. (7:148)

If the Soviets decide to violate the Finnish border, with or without their consent, they would most probably do so in the north. An invasion across the top of the Finnish plateau would most likely proceed along the "Finnish finger" north of Sweden towards Trosno.

Another option for a Soviet attack involves violation of Finnish and Swedish neutrality. Swedish neutrality, whose deep roots make it almost a sacred tradition, has its drawbacks even from the Swede's point of view. Sweden probably sees the chances of a Warsaw Pact attack far more likely than a NATO invasion. In the event of a Soviet land invasion through northern Sweden enroute to central Norway, Sweden's long history of neutrality does not lend itself to the smooth operation of a combined NATO/Swedish ground defense.

It appears that a Soviet invasion across Sweden, be it amphibious or entirely by land, would be fraught with obstacles. Swedish forces are not to be taken lightly. Although probably unable to stop an all out Soviet invasion, they would certainly make the invading army pay a high price. Depending on the Finnish stance, the Swedes may be battling an army already somewhat attrited by an advance through Finland. Additionally, the terrain, spotted by numerous lakes lying athwart the axis of advance, would ensure slow going and possibly allow time for reinforcements (7:95) If the race for the prepositioned stocks in Trondheim could be won by U.S. Marines, the success of this option, from a Soviet perspective, would be questionable.

POLITICAL FACTORS

Certainly, a determining factor in the success of a NATO counter invasion along the Norwegian front will be the amount of

leadtime allowed for mobility. If prehostility indications are sufficient to allow preparation by Norwegian and supporting NATO troops, possibilities for containment and defeat of an invasion are significantly enhanced. This assumption presupposes the efficient use of the lead time. Numerous diplomatic and political obstacles would have to be overcome to quickly allow the movement of reinforcements.

Norway's ability to withstand a Soviet invasion actually becomes more suspect when one examines its political structure. The Norwegian parliament, called the Storting, is the primary legislative body in the country.

One critical element of Norway's constitution is the stipulation that, except to repel hostile attack, foreign military forces may not be introduced into the country without the consent of the Storting. (14/98)

Furthermore:

Most of the Storting members, like Norway's population as a whole, are primarily concerned with domestic economic and political issues which have more immediate impact upon their daily lives. Unlike the U.S. Congress, which is composed predominately of lawyers, the Storting is a uniquely representative body comprised of teachers, fishermen, farmers, businessmen, and housewives. (14/98)

These political procedures could place Norway in jeopardy even under the favorable circumstances of an advanced notice Soviet attack. Considering the make up of the Storting, one has to wonder how long the debate would rage prior to introduction of necessary troop reinforcements.

STRENGTHS AND WEAKNESSES

An examination of Norway's ability to hold the line once a Soviet attack has commenced can be conducted by looking at its

strengths and weaknesses toward that end. On the positive side, Norway has committed an acceptable level of national resources to its defense industry. The Norwegian government has proven a commitment to the alliance (through its response to pressure from the U.S.) by increasing the defense share of its budget to three percent beginning in 1972. Most of this increase has gone to the modernization of its air force. As a result, its F-16 fleet could possibly be useful against a Soviet advance. Unfortunately, Norway has yet to develop a surface to ground missile capability for the F-16. (10:56)

The Norwegians have maintained an active NATO exercise schedule. Ground unit exercises including Cold Winter, Anchor Express and Teamwork involve units from the U.S., Canada, and Great Britain. Naval exercises include Summerex and Ocean Safari. (7:73) Besides fostering force coordination, these increase operational proficiency in the extremely cold environments of Norway.

An examination of weaknesses in Norway's defense posture in light of the deterrence equation (capability * will = deterrence) reveals serious deficiencies. These permeate the political and military structure. Norwegians have been rather naive in their attitudes toward their deterrent posture. Their almost total reliance on big brother NATO has led to serious warfighting shortfalls. They lack high marks in both will and capability.

A closer look at the "will" factor of the equation evidences political deficiencies concerning dealings with the Soviet Union. The Russians have had a very strong influence over internal political debates on issues dealing with Norway's membership in NATO. Has Norway stood up to the Soviets over the past forty years? The mere

fact of its membership in the alliance can be cited as evidence of its resolve to counter Soviet aggression. Unfortunately, the many restrictions Norway brings with its membership indicate erosion of its resolve. Stipulations dealing with basing of foreign troops, prohibition on nuclear weapons and geographic limits on live exercises have all resulted from capitulation to Soviet political pressure. This lack of political will has had a profound effect on NATO capability in the Northern Flank. NATO must rely on a best case scenario of seven to ten days notice of impending attack for any chances of retaining control of the Northern Front.

An analysis of Norwegian military force distribution and composition reveals "capability" deficiencies. Force distribution within Norway does not lend itself to defense of the country from Soviet attack with less than a week to ten days notice. Poor road and rail networks almost isolate the battlefield where the most probable initial engagements will occur. Norwegian armed forces are concentrated in areas significantly south of the most probable axis of attack, thus are unable to respond immediately to attacks in the North.

Force composition does not paint a better picture. Although the Norwegian Army can boast of sufficient force numbers compared to personnel only 19,000 of the total are on active duty. The rest must be called up from the reserves and home guard. Additionally, the Norwegian Army suffers from serious deficiencies in equipment and training. The huge portion of the defense budget designated to the procurement of the F-16 has hurt Norway's ground forces in recent years. The Army has suffered from receipt of only 14 per cent of the

defense budget. (7:129) Defense of troops against air and tank attack is one of the most striking deficiencies. Additionally, meager coastal defenses would not be sufficient to repel the virtually certain Soviet amphibious assault that would be supported by portions of the huge Soviet Northern Fleet.

CHAPTER IX

FINDINGS

THE SOVIET ATTACK

World War III will be fought on at least two fronts. The European Front will surely be the center court attraction. But, a Soviet thrust into Germany makes a simultaneous attack against the Northern Front absolutely necessary. Reasons for this logic strike at deeply rooted fears within the Soviet Union. First, the Soviets are deathly afraid of attacks on their homeland that could be carried out without a buffer state to provide an acceptable reaction time. They would face this situation in the Northern Flank should a fortified Norway remain in the hands of NATO. Second, their belief in a winnable nuclear war requires the maintenance of a credible nuclear reserve force. Their fear of destruction of their ballistic missile submarine threat has led them to implement extraordinary measures to ensure their survival.

PHASE I

The Soviets will most likely attack Norway by land, sea and air across the northern portion of the country. Although Swedish and Finland neutrality might not be honored throughout the war, it most probably will not be violated during the initial attack. Norway's most credible military arm, their air force, will be significantly threatened through an offensive air campaign against their F-16 bases. Norwegian supply routes could be easily cutoff through strikes against the single connecting rail and road network. This may not be necessary as mobilization of Norway's reserve and home guard troops may be overtaken by events. Soviet ground forces

will be slowed by natural barriers but resistance by the comparably small and ill-equipped Norwegian Army will be minimal. Soviet air dropped and amphibious assault forces along the coast will also receive light resistance. Once the north is isolated, assaults will be staged against southern Norway. Attacks on U.S. prepositioned equipment sites in the southern counties will diminish NATO's ability to reinforce Norway. Simultaneous attacks against Spitzbergen, Iceland, Jan Mayen and Bear Island will secure operating areas throughout the Norwegian and Barents Seas.

PHASE II

With Norway secure, sea control will begin. Soviet aims in this phase will be isolation of the Norwegian Sea north of the GIUK gap. The Soviets may set up air defenses along the west coast of Norway and deploy submarine assets in easily defended fjords. Heavy mining operations will deny allied access to these and other strategic ports. Bases along the coast will support sea denial operations against carrier battle groups and U.S. submarines isolated north of the gap.

PHASE III

The third phase of the Soviet Northern Flank operations will involve interdiction against U.S. resupply lines toward the European Central Front. If effective, NATO will be strangled and defeated in ten to fourteen days.

Under the present circumstances, NATO cannot rely on the Norwegians to provide the time needed for adequate reinforcement of the Northern Flank. NATO forces, if forced to fight their way back into the Norwegian Sea, will be at a severe disadvantage. Lines of

communication and the inherent advantages of a defensive strategy favor the Soviets to the point of questioning whether reestablishment of Norwegian Sea control by NATO would be possible.

UNFOUNDED RELIANCE

Our unfounded reliance on Norway to hold the Northern Flank is more than a gross miscalculation. It has seriously undermined the employment of our maritime strategy. If Norway cannot be counted upon to uphold its NATO commitments, be it for political or military reasons, what changes must be made in the composition of forces in the Nordic region? How must we change the way we operate those forces? What pressures must be brought to bear upon Norway to help shore up this "chink in our armor"? Correct answers to these questions are crucial to the preservation of NATO in the event of a global conflict.

CHAPTER X

RECOMMENDATIONS

1. Permanently assign two carrier battle groups and Marines to the Norwegian and Barents Seas and maintain a wartime contingency for four battle groups. It is clear that the destruction of Soviet strategic submarines will require an aggressive, offensive maritime strategy. We cannot wait until the war begins to learn how to aggressively fight in the Barents Sea. The northern latitudes pose unique communication problems whose solutions must be found through frequent operation in that environment. Additionally, Soviet submarine quieting programs and beneath the ice cap operations have eroded the US submarine capability edge enjoyed in previous years. Reliance on coordinated operations among dissimilar anti-submarine platforms will become more and more essential to ensure Soviet submarine destruction. Carrier protection of maritime air assets will also become crucial in this hostile environment. These complicated operations will give us a wartime edge only if practiced in peacetime in the actual environment. Forward basing of 2 carrier battle groups in Great Britain along with a Marine Amphibious Brigade in Iceland would provide added presence, better wartime preparation and quicker response times for US and NATO forces.
2. Pressure Norway to comply with the following:
 - Move more of her ground and air intercept forces to the northern counties, including Finnmark, to provide an effective and immediate response to a Soviet attack.
 - Begin construction of alternate north-south road and rail

networks to improve lines of communication.

- Open Jan Mayen island to development as a detachment sight for F-3 Orion anti-submarine aircraft stationed in Keflavik, Iceland. A anti-submarine aircraft base further north is long overdue in response to northward movement of submarine bastions.

- Assign a small contingent of intelligence personnel to the Svalbard Islands under the guise of assignment to a meteorological station to provide surveillance of areas in the far north.

- Provide increased numbers of nuclear cruise missile assets aboard surface, submarine and air platforms assigned to the Nordic Region for use in a ground support role. European Supreme Allied Commanders have long voiced the likely possibility of tactical nuclear weapon use to counter the overwhelming conventional superiority in Central Europe. Soviet conventional superiority on the Northern Flank is just as overwhelming. Political climates within Norway clearly indicate strong resistance would be present to introduction of battlefield nuclear weapons with accompanying Marines should they be allowed into Norway prior to hostilities. (As evidence, note the strong support in Norway for a nuclear free zone in the Nordic region).

3. Dedicate increased research and development efforts to the following areas:

- space based submarine detection systems to reestablish a clear Soviet submarine detection superiority.

- reliable north latitude communications systems for enhanced command and control.

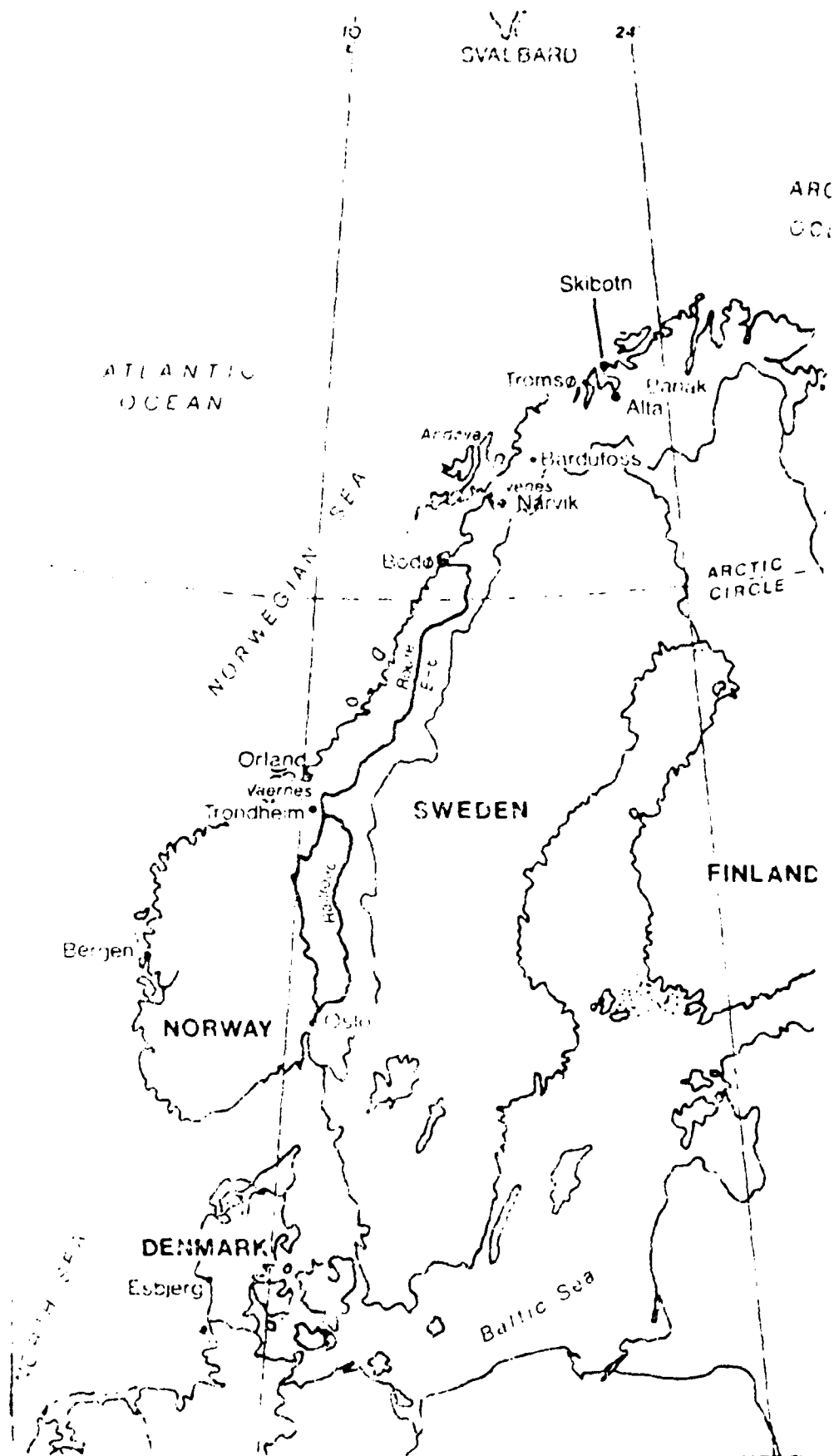
- ice penetrating sonobouys for use by maritime air assets.

- under the ice SOSUS arrays.

- spaced based bomber and cruise missile interceptors to enhance carrier survivability.

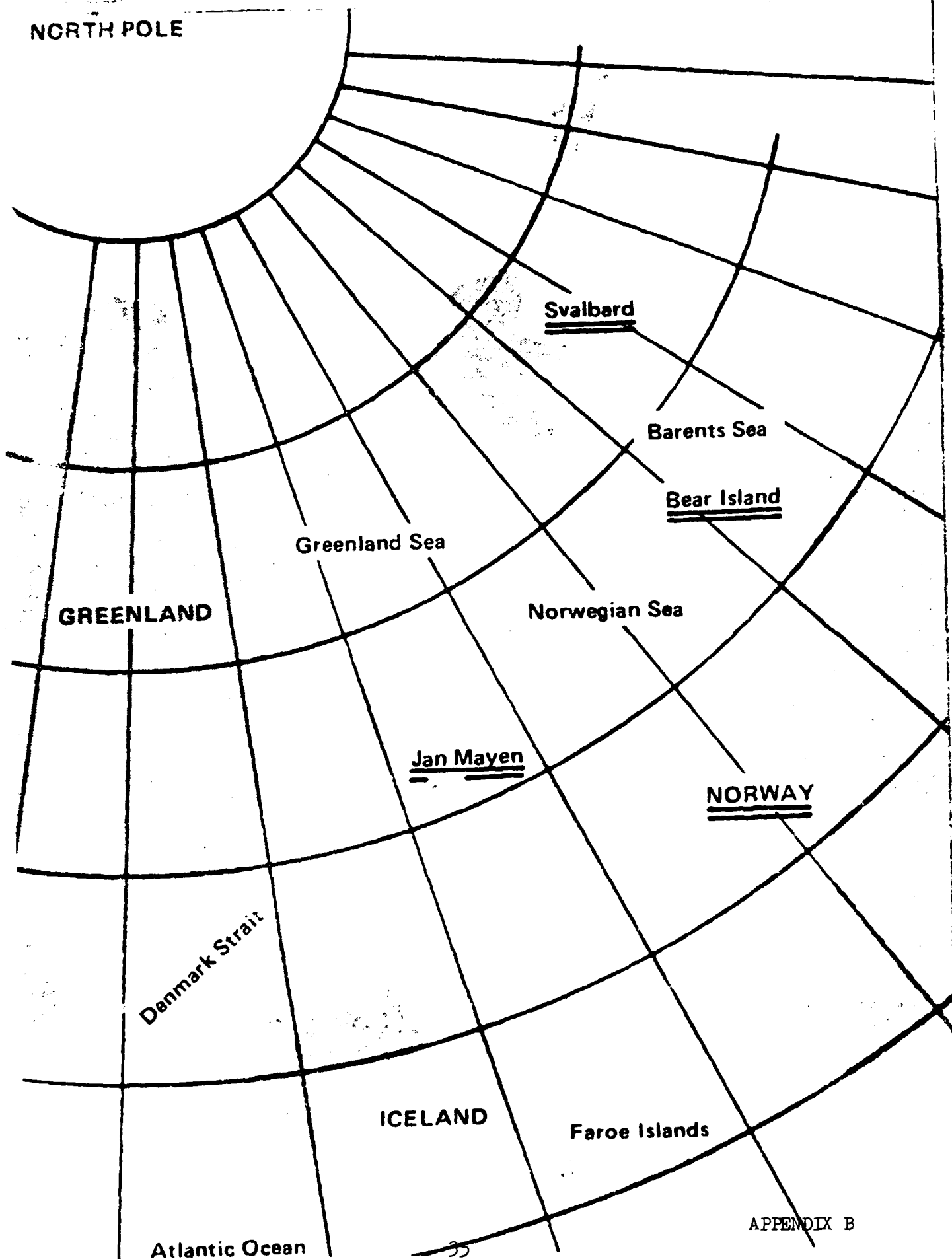
- reliable secure communication links between subsurface and surface/air antisubmarine assets to improve command and control capabilities of US nuclear submarines.

The situation on NATO's Northern Flank today is grim. The prospects for the future are more grim if we continue building our maritime strategy on the current plans involving Norway's contribution to defense of the Northern Flank. We must reorient our thinking, policies, and force structure in order to prepare for a more realistic wartime scenario on NATO's northern front.



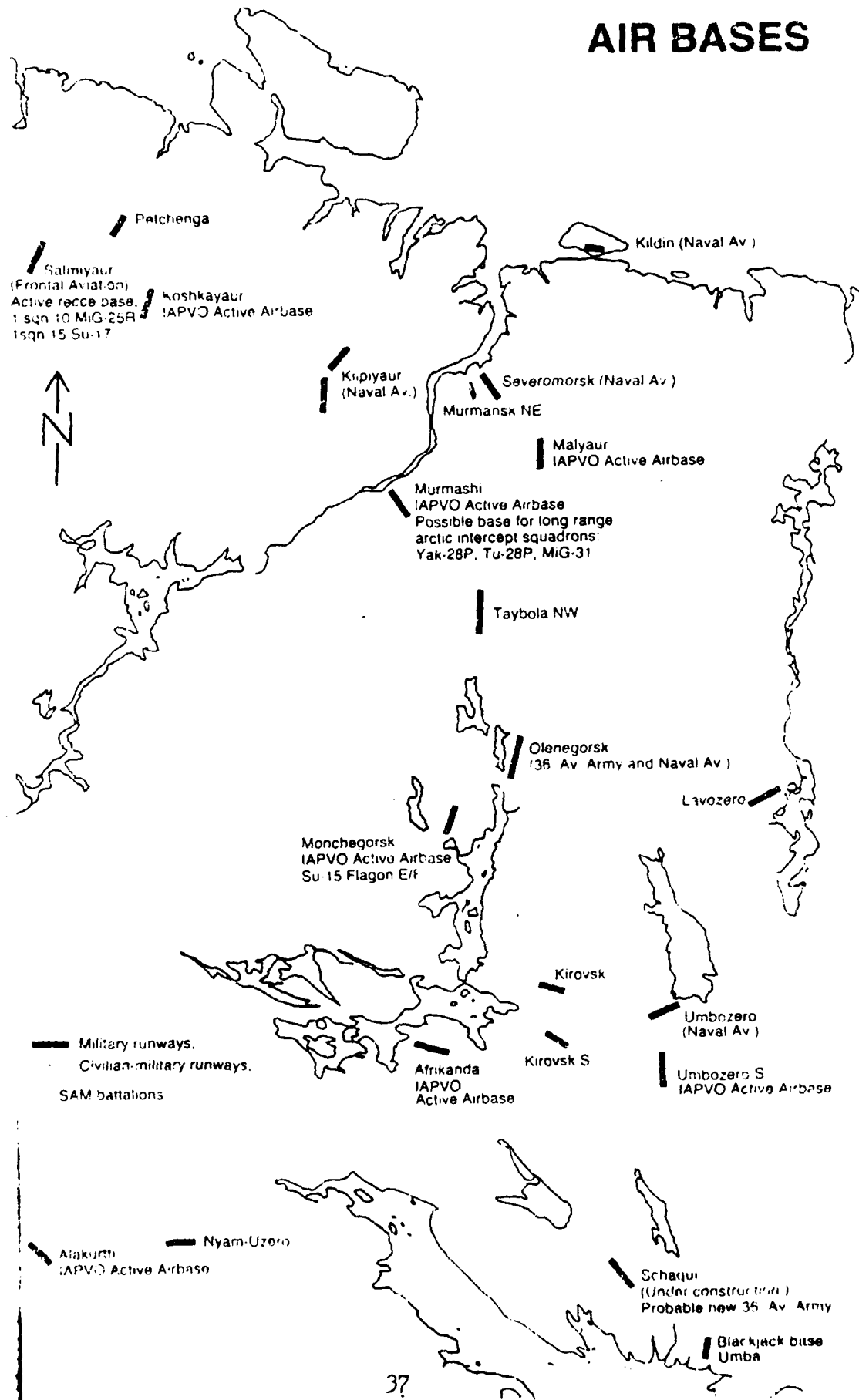
APPENDIX A

NORTH POLE



APPENDIX B

AIR BASES



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